CITY OF TAKOMA PARK POLICE EMPLOYEES' RETIREMENT PLAN



ACTUARIAL VALUATION AS OF JUNE 30, 2008

TABLE OF CONTENTS

<u>I</u>	<u>Page</u>
troductory Letter	1
rticipant Summary	2 - 5
sset Information	6
tuarial Costs	7
ssumptions and Methods	8 - 9
an Provisions10	- 13
atement No. 25 of the GASB	14



October 7, 2008

PERSONAL & CONFIDENTIAL

Ms. Barbara Matthews City Administrator City of Takoma Park 7500 Maple Avenue Takoma Park, MD 20912

Re:

City of Takoma Park Police Employees'

Retirement Plan Valuation

Dear Barb:

The following report sets forth the actuarial valuation of the City of Takoma Park Police Employees' Retirement Plan. The valuation is as of June 30, 2008 and is based on participant data as submitted by the City of Takoma Park and asset information submitted by Mercantile Safe Deposit and Trust Company and PNC Institutional Investments.

PLAN ASSETS

The market value of plan assets as of June 30, 2008 was \$4,500,963.

PRINCIPAL RESULTS

The principal purpose of the valuation is to set forth the City's contributions for the fiscal year ending June 30, 2010. In addition, the report sets forth the information on the plan for the City's financial statements and for the plan's own financial statements.

The total recommended employer contribution for the plan year and fiscal year ending June 30, 2010 is 34.70% of covered payroll. This is in addition to employee contributions of 7% of pay. Recommended contributions are based on a 20-year amortization of the unfunded liability. It is anticipated that the contribution will be paid in December 2009 and will equal 34.70% of the rate of pay for covered employees at that time. Details of the contribution calculation are provided later in this report. A statement of funding progress under GASB 25 is also included. The contribution increase as a percent of payroll is largely due to (1) one newly disabled member and (2) a nearly three-fold increase in disability rates to produce an expected three disability occurrences every four years.

I, Thomas Lowman, am a member of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Sincerely,

BOLTON PARTNERS, INC.

Thomas B. Lowman, FSA

Mark Kelbaugh, ASA

Participant Summary

SERVICE - SALARY DATA AS OF JUNE 30, 2008

Age	Number of Employees	Average <u>Service</u>	Average <u>Salary</u>
Under 20	0	0.00	\$ 0.00
20 - 24	2	1.37	\$ 41,548.22
25 - 29	8	2.04	\$ 44,398.06
30 - 34	6	3.53	\$ 49,617.68
35 - 39	15	10.31	\$ 58,407.54
40 - 44	5	16.13	\$ 72,712.92
45 - 49	3	9.61	\$ 55,165.02
50 - 54	2	22.92	\$ 69,903.22
55 - 59	1	1.33	\$102,223.36
Averages		8.37	\$ 56,742.61

AGE - SALARY DATA AS OF JUNE 30, 2008

<u>Service</u>	Number of Employees	Average <u>Age</u>	Average <u>Salary</u>
Under 2	12	32.22	\$47,154.43
2	4	31.96	\$46,162.13
3	2	36.08	\$49,537.13
4	0	0.00	\$ 0.00
5 - 9	8	37.60	\$55,669.52
10 - 14	7	38.12	\$62,412.09
15 - 19	4	40.57	\$65,098.85
20 - 24	4	45.10	\$79,157.16
25 & over	1	53.83	\$74,348.84
Averages		36.92	\$56,742.61

AGE - SERVICE DATA AS OF JUNE 30, 2008

Salary	Number of Employees	Average <u>Age</u>	Average <u>Service</u>
\$20,000 - \$29,999	0	0.00	0.00
\$30,000 - \$39,999	5	29.35	0.75
\$40,000 - \$49,999	10	31.98	2.10
\$50,000 - \$59,999	14	36.27	8.19
\$60,000 - \$69,999	5	43.26	16.60
\$70,000 & over	8	45.02	16.14
Averages		36.92	8.37

	<u>Active</u>	Terminated <u>Vested</u>	Retired/ <u>Disabled</u>	<u>Total</u>
Participants as of July 1, 2007	40	1	14	55
New Participants	5	N/A	N/A	5
Terminated Vested	0	0	N/A	0
Terminated Non-Vested	0	N/A	N/A	0
Terminated Paid Out	(2)	0	N/A	(2)
Retired	(1)	0	1	0
Deceased	0	0	0	0
Beneficiaries	_0	_0	_0	_0
Participants as of July 1, 2008	42	1	15	58

Asset Information

ASSET STATEMENT FOR THE PLAN YEAR ENDED JUNE 30, 2008

Market Value as of July 1, 2007	\$4,287,464
Receipts:	
Employer Contributions Employee Contributions Other Receipts Investment Return Realized Gain/(Loss) Unrealized Gain/(Loss)	\$ 651,866 163,645 0 301,805 7,271 <u>(414,379)</u> \$ 710,208
Disbursements:	
Benefit Payments Administrative Expenses	\$ 414,693 <u>82,016</u> \$ 496,709
Net Increase in Assets	\$ 213,499
Market Value as of June 30, 2008	\$4,500,963

Actuarial Costs

ACTUARIAL COSTS

Valuation Rate	7/1/2007 8.00%	<u>7/1/2008</u> 8.00%
Number of Participants		
Active	40	42
Retired	14^{1}	15^{2}
Terminated Vested	1	1
Total	55	58
Active Payroll	\$2,204,862	\$2,383,190
1. Actuarial Accrued Liability		
Active	\$4,579,517	\$6,328,991
Retired	2,807,824	2,860,646
Disabled	3,302,883	4,133,049
Terminated Vested	82,224	<u>79,986</u>
Total	\$10,772,448	\$13,402,672
2. Market Value of Assets	\$4,287,464	\$4,500,963
3. Unfunded Liability (1) – (2)	\$6,484,984	\$8,901,709
Amortization Factor at 8% and		
increasing 5%/year over 20 years	15.5066	15.5066
4. Amortization of Unfunded Liability	\$ 418,208	\$ 574,059
5. Amortization of Unfunded as a		
Percentage of Payroll	18.97%	24.09%
6. Employer Normal Cost	\$ 224,075	\$ 252,920
7. Employer Normal Cost as a		
Percentage of Payroll	10.16%	10.61%
8. Total Employer Contribution (4) + (6)	\$ 642,283	\$ 826,979
9. Total Employer Contribution as a Percentage of Payroll (5) + (7)	29.13%	34.70%

 $^{^{1}}$ Includes 7 disabilities, 1 alternate payee and 1 beneficiary. 2 Includes 8 disabilities, 1 alternate payee and 1 beneficiary.

Assumptions and Methods

ASSUMPTIONS AND METHODS

<u>Funding Method</u>: Projected Unit Credit. Costs are determined as a

percentage of payroll based on the assets and liabilities on the valuation date. The liability for disability benefits is fully accrued for participants hired before July 1, 2003. Disability attribution method for those hired on or after July 1, 2003 is linear to decrement. Rate of pay data provided for the valuation is assumed to be equal to the pay for

the coming year.

Asset Method: Market Value.

<u>Interest</u>: 8% compounded annually.

Post Retirement
COLA Increases: 3% compounded annually, no limit.

Turnover:

Mortality: RP-2000 Combined Healthy Table with blue collar

adjustment. For disabled participants, the table is set

forward 3 years.

Salary Increases: 5.5% compounded annually.

<u>Disability:</u> Sample rates are:

<u>Age</u>	<u>Rate</u>
25	0.59%
35	1.10%
45	2.85%

Half the disability benefits are assumed to be catastrophic service connected.

Table T-5 of the Actuaries Pension Handbook adjusted for service. Sample rates are:

Rates by Service					
<u>Age</u>	<u>0 - 9</u>	<u>10 - 14</u>	15 and over		
25	7.724%	5.793%	1.545%		
35	6.276%	4.707%	1.255%		
45	3.975%	2.981%	0.795%		

ASSUMPTIONS AND METHODS

(continued)

Turnover: (continued) Rates are 75% of the initial rates between 10 and 15

years of service and 20% of the initial rates after 15 years. Employees that quit before age 50 are

assumed to withdraw their contributions.

Retirement: Participants are assumed to retire when they reach

their Normal Retirement Date.

Sick Leave: Accrued benefit loaded 3.4% for sick leave.

Pay Limit: None.

Pre-Employment Military Service: Actual service credit.

Marriage Assumption: 80% of participants are assumed to be married.

Husbands 3 years older.

<u>Change in Assumptions:</u> Disability rates were increased to produce

approximately 3 expected disabilities every four

years.

Change in Methods: None.

Plan Provisions

PLAN PROVISIONS

Normal Retirement Age: 25 years of service, or age 62 with 5 years of

service, if earlier.

Normal Form of Benefit: Single Life Annuity with death benefit of

undistributed employee contributions plus accumulated interest at retirement. Other forms

are the actuarial equivalent.

Post Retirement Cost of Living Increases: CPI index, but no more than would cause the

participant's benefit to exceed an amount equal to the original benefit compounded at 3% per

year.

Employee Contributions: 7% of base pay.

Average Compensation: Average of base pay for 36 highest consecutive

months.

Benefit Formula: 1 ½% of average compensation for each year of

service earned before June 30, 2000, plus 2% of average compensation for each year of service earned after July 1, 2000. Total service is limited to 25 years, with post-July 1, 2000 service being

counted first.

The above amount will be increased by 2% of average compensation for each year of service attributable to unused sick leave (limited to 2

years.)

Service: Service includes:

- 1. Time as an active member contributing to the plan.
- 2. Unused sick leave (22 days = 1 month).
- 3. Service prior to July 1, 2001 under the State plan that was transferred to this plan at its inception.
- 4. For employees hired before July 1, 2001, up to five years of pre-employment military service if eligible under the State plan. If not eligible under the State plan, up to five years of pre-employment

10

PLAN PROVISIONS

(continued)

military service may be credited after 10 years of credited service with the plan.

Early Retirement:

Age 55 with at least 15 years of service. Benefit is reduced actuarially from normal retirement date.

Termination Prior to Retirement:

Return of employee contributions with 5% interest or if vested (after five years of service) an annuity beginning age 62 (or at the early retirement date, actuarially reduced.)

Line of Duty Disability:

Catastrophic disability:

The greater of:

- (a) the benefit due to employee contributions or
- (b) $66 \frac{2}{3}\%$ of base pay.

Non-Catastrophic disability:

If hired before July 1, 2001, the greater of:

- (a) the benefit due to employee contributions or
- (b) 662/3% of base pay.

If hired on or after July 1, 2001, the greater of:

- (a) the benefit due to employee contributions or
- (b) 50% of base pay.

Ordinary (Non-Line of Duty)
Disability:

5 Years of Service is required for this benefit.

The benefit is equal to the accrued benefit, without actuarial reduction.

If a participant is under age 62, or has earned less than 25 years of credited service as of the disability date, the years of credited service are projected. They include both the actual years of credited service, plus any credited service which would have otherwise been earned as of the earlier of the participant's 62nd birthday or the date the participant would have earned 25 years of credited service.

PLAN PROVISIONS

(continued)

<u>Line of Duty Pre-Retirement</u>
<u>Death Benefit:</u>

If the participant is unmarried at his date of death, his beneficiary is entitled to receive a refund of the participant's contributions with interest, plus a single lump sum equal to the participant's compensation as of the date of death.

If the participant is married or has a registered domestic partner at the date of death and is eligible for normal or early retirement, his surviving spouse or partner may receive the benefit described above, or an annuity for the spouse's or partner's lifetime or earlier remarriage/re-registration, equal to a 66 2/3% of base pay. Upon the death or remarriage/re-registration of the surviving spouse or domestic partner, a benefit equal to 50% of base pay will be paid to the surviving children.

If the participant is not married and has designated one or more child as the primary beneficiary, the surviving children will receive an aggregate annuity equal to 50% of base pay. This benefit ceases upon the attainment of age 18, or 23 if a full-time student.

Ordinary (Non-Line of Duty)
Pre-Retirement Death Benefit:

If the participant is unmarried at his date of death, his beneficiary is entitled to receive a refund of the participant's contributions with interest, plus a single lump sum equal to the participant's compensation as of the date of death.

PLAN PROVISIONS

(continued)

If the participant is married or has a registered domestic partner at the date of death and is eligible for normal or early retirement, his surviving spouse or partner may receive the benefit described above, or an annuity for the spouse's or partner's lifetime, equal to the Joint and 100% Survivor benefit that would have been payable upon the participant's death.

Statement No. 25 of the GASB

STATEMENT NO. 25 OF THE GOVERNMENTAL ACCOUNTING STANDARDS BOARD

Schedules of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) - PUC (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a)/c)
7/1/2001	\$1,225,888	\$ 5,717,108	\$4,491,220	21.4%	\$1,857,977	241.7%
7/1/2001	\$1,434,950	\$ 5,934,249	\$4,499,299	24.2%	\$1,923,210	233.9%
7/1/2003	\$1,860,531	\$ 7,245,960	\$5,385,429	25.7%	\$1,856,566	290.1%
7/1/2004	\$2,388,059	\$ 8,309,009	\$5,920,950	28.7%	\$1,876,807	315.5%
7/1/2005	\$2,849,268	\$ 8,910,824	\$6,061,556	32.0%	\$1,919,819	315.7%
7/1/2006	\$3,371,139	\$ 9,609,655	\$6,238,516	35.1%	\$1,961,026	318.1%
7/1/2007	\$4,287,464	\$10,772,448	\$6,484,984	39.8%	\$2,204,862	294.1%
7/1/2008	\$4,500,963	\$13,402,672	\$8,901,709	33.6%	\$2,383,190	373.5%